ECONOMICS
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**U.S. CENSUS BUREAU** 

U.S. CENSUS BUREAU For Data - (301) 763-4673 For Questions - Michael Davis, Joe Huesman or Linnet Holland (301) 763-1605 FOR RELEASE 10:00 AM EST, TUESDAY, APRIL 1, 2003 CB03-56

## FEBRUARY 2003 CONSTRUCTION AT \$872.2 BILLION ANNUAL RATE

Construction put in place during February 2003 was estimated at a seasonally adjusted annual rate of \$872.2 billion, 0.2 (±4.8) percent below the revised January estimate of \$873.7 billion, according to the U.S. Commerce Department's Census Bureau. The February figure is 0.2 (±4.8) percent below February 2002.

During the first 2 months of this year \$116.8 billion of construction was put in place, 0.9 (±4.8) percent above the \$115.8 billion for the same period in 2002.

In constant (1996) dollars, the February annual rate was \$695.0 billion, 0.5 (±4.8) percent below the revised estimate of \$698.7 billion for January.

#### PRIVATE CONSTRUCTION

Spending on new residential housing units was at a seasonally adjusted annual rate of \$328.1 billion in February, 0.3 (±1.6) percent above the revised January estimate of \$327.2 billion. Nonresidential building construction was at a rate of \$158.8 billion, 0.3 (±3.2) percent above the revised January estimate of \$158.3 billion.

### PUBLIC CONSTRUCTION

In February, the estimated seasonally adjusted annual rate of public construction put in place was \$203.8 billion, 2.9 (±4.7) percent below the revised January estimate of \$210.0 billion.

March 2003 data will be released on May 1, 2003 at 10:00 AM EDT.

## **EXPLANATORY NOTES**

In interpreting changes in the statistics in this release, note that month-to-month changes in seasonally adjusted statistics often show movements which may be irregular. It may take 2 months to establish an underlying trend for total construction and as long as 8 months for specific categories of construction.

The statistics in this release are estimated from several sources and surveys and are subject to sampling variability as well as nonsampling errors including bias and variance from response, nonreporting, and undercoverage. Estimates of the standard errors are provided in Table 4 for selected types of construction. Whenever a statement such as "2.3 (±3.1) percent above" appears in the text, this indicates the range (-0.8 to +5.4 percent) in which the actual percent change is likely to have occurred. All ranges given are 90 percent confidence intervals. If the range contains zero, it is uncertain whether there was an increase or decrease; that is, the change was not statistically significant. For any comparison cited without a confidence interval, the change is statistically significant. Statistics for the current month are preliminary estimates subject to revision in following months as additional data become available. The average absolute percent changes from preliminary estimate to first revision for the major seasonally adjusted components are as follows: total construction, 0.7 percent; private construction, 0.9 percent; private residential construction, 0.7 percent; private nonresidential construction, 1.4 percent; and public construction, 1.6 percent.

More detailed data will appear in Current Construction Reports, C30/03-2, to be issued later this month. A discussion of sources and reliability of the data appears in Current Construction Reports, C30/02-5.

Our internet address is: <a href="http://www.census.gov/c30">http://www.census.gov/c30</a>

NOTICE: Beginning August 1, 2003, the current types of construction classifications will no longer be published; new monthly detailed types of construction will be presented. Also, the constant dollar series will be discontinued. For further details see:

# http://www.census.gov/const/C30/newtc.html

This press release is available the day of issue through the Commerce Department's on-line Economic Bulletin Board. For information, call (202) 482-1986.

Table 1. Value of Construction Put in Place in the United States, Seasonally Adjusted Annual Rate

[Billions of dollars. Detail may notadd to total due to rounding. Percent changes based on unrounded figures]

Type of construction									Percent Feb 2 from	2003	
	Feb <sup>p</sup> 2003	Jan <sup>r</sup> 2003	Dec <sup>r</sup> 2002	Nov 2002	Oct 2002	Sep 2002	Aug 2002	Feb - 2002	Jan 2003	Feb 2002	
	Current dollars										
Total construction	872.2	873.7	856.7	850.5	840.0	832.2	829.8	874.3	- 0.2	- 0.2	
Private construction <sup>1</sup>	668.4	663.8	650.0	643.8	636.8	626.5	627.1	659.4	0.7	1.4	
Residential buildings <sup>2</sup> New housing units	454.4 328.1	451.5 327.2	440.2 314.7	427.2 304.8	418.0 299.7	412.2 296.7	409.3 292.7	413.5 293.8	0.6 0.3	9.9 11.7	
1 unit	291.3	291.7 35.6	282.0	273.4 31.4	267.9	263.8 33.0	259.3 33.4	260.0 33.9	- 0.1 3.4	12.0 8.7	
2 units or more  Nonresidential buildings	36.8 158.8	158.3	32.7 155.6	161.8	31.9 160.2	156.5	159.8	183.2	0.3	- 13.3	
Industrial	14.2 32.1	14.3 32.5	14.0 34.5	14.3 35.2	14.2 34.2	13.8 34.5	14.6 36.7	19.6 41.7	- 0.5 - 1.3	- 27.4 - 23.0	
Hotels, motels	8.9	9.1	8.8	9.0	8.9	9.0	9.1	12.2	- 2.8	- 27.1	
Other commercial	55.5 8.5	55.1 8.2	51.7 7.9	54.2 8.2	54.0 7.7	52.8 7.9	53.0 8.0	61.5 8.7	0.8 2.9	- 9.7 - 2.6	
Educational	14.0	14.1	13.8	14.1	14.2	12.6	12.4	14.4	- 1.3	- 3.2	
Hospital and institutional Miscellaneous buildings	18.1 7.6	17.6 7.4	17.7 7.4	19.1 7.7	18.6 8.4	18.0 8.0	17.4 8.6	16.2 9.0	3.1 2.8	11.9 - 16.0	
Telecommunications	(NA)	14.4	16.7	15.7	16.4	15.2	16.4	17.2	(NA)	(NA)	
All other private	2.2 <b>203.8</b>	2.3 <b>210.0</b>	2.0 <b>206.7</b>	2.4 <b>206.7</b>	2.4 <b>203.2</b>	2.6 <b>205.7</b>	2.6 <b>202.8</b>	3.2 <b>214.9</b>	- 5.2 <b>- 2.9</b>	- 33.6 <b>- 5.2</b>	
Housing and redevelopment	6.4	6.1	5.5	5.4	5.1	5.6	6.0	5.2	4.9	- <b>3.2</b> 24.1	
Industrial	1.8	2.2	1.8	2.0	1.6	1.4	2.2	2.3	- 17.4	- 20.5	
Educational Hospital	62.2 5.0	65.2 5.0	63.4 5.2	64.4 5.2	65.0 4.8	64.8 5.3	62.4 5.1	63.9 5.1	- 4.6 1.4	- 2.7 - 0.5	
Other public buildings	28.6	29.8	29.4	31.2	31.2	30.6	30.6	32.4	- 3.9	- 11.7	
Highways and streets	56.2 3.3	57.1 3.2	56.7 3.4	54.5 3.0	52.0 2.7	54.7 3.1	53.8 2.8	61.7 2.5	- 1.4 2.8	- 8.9 30.3	
Conservation and development	8.7 9.0	8.5 9.4	8.2 9.1	7.7	8.3 9.0	7.7 9.2	7.5 9.5	8.7 9.9	3.1	1.0 - 8.9	
Sewer systems	7.4	7.6	7.5	9.1 7.2	7.3	7.4	7.1	7.2	- 4.1 - 2.7	3.3	
Miscellaneous public	15.0	15.9	16.5	17.1	16.2	15.8	15.7	16.1	- 5.7	- 7.0	
					1996	dollars					
Total construction	695.0	698.7	691.4	689.8	683.5	679.6	680.0	720.9	- 0.5	- 3.6	
Private construction <sup>1</sup>	<b>529.6</b> 354.7	<b>528.3</b> 354.7	<b>522.3</b> 349.4	<b>520.6</b> 341.7	<b>517.3</b> 336.3	<b>511.1</b> 333.5	<b>513.4</b> 332.7	<b>542.7</b> 337.8	<b>0.2</b> (Z)	<b>- 2.4</b> 5.0	
Residential buildings <sup>2</sup> New housing units	256.1	257.1	249.8	243.8	241.1	240.1	238.0	240.0	- 0.4	6.7	
1 unit	227.4 28.7	229.1 27.9	223.8 25.9	218.7 25.1	215.5 25.6	213.4 26.7	210.9 27.1	212.4 27.7	- 0.8 2.8	7.1 3.8	
Nonresidential buildings	126.9	126.8	125.5	131.2	130.2	127.6	130.3	149.9	0.1	- 15.4	
Industrial	11.3 25.6	11.4 26.0	11.3 27.8	11.6 28.6	11.5 27.8	11.2 28.2	11.9 29.9	16.0 34.1	- 0.7 - 1.5	- 29.1 - 24.8	
Hotels, motels	7.1	7.3	7.1	7.3	7.2	7.3	7.4	10.0	- 3.0	- 28.8	
Other commercial	44.4 6.8	44.1 6.6	41.7 6.4	43.9 6.6	43.9 6.3	43.0 6.4	43.2 6.6	50.3 7.1	0.5 2.7	- 11.8 - 4.9	
Educational	11.2	11.3	11.1	11.4	11.5	10.3	10.1	11.8	- 1.5	- 5.4	
Hospital and institutional Miscellaneous buildings	14.5 6.1	14.1 5.9	14.3 5.9	15.5 6.3	15.1 6.8	14.6 6.5	14.2 7.0	13.2 7.4	2.9 2.6	9.3 - 17.9	
Telecommunications	(NA) 1.8	13.2 1.9	15.5 1.7	14.6 2.0	15.2 2.0	14.2 2.2	15.2 2.2	15.9 2.8	(NA) - 4.9	(NA) - 35.1	
Public construction	165.4	170.4	169.1	169.1	166.3	168.5	166.6	178.3	- 2.9	- 7.2	
Housing and redevelopment	5.0	4.8	4.4	4.3	4.1	4.5	4.9	4.2	4.2	18.6	
Industrial	1.5 49.7	1.8 52.2	1.5 51.2	1.6 52.2	1.3 52.8	1.1 52.8	1.8 50.9	1.9 52.3	- 17.6 - 4.9	- 22.3 - 4.9	
Hospital	4.0	4.0 23.9	4.2 23.7	4.2 25.3	3.9 25.3	4.3 24.9	4.2 24.9	4.1 26.5	1.2	- 2.8 - 13.8	
Highways and streets	45.8	46.4	46.4	44.2	42.1	44.2	43.7	50.8	- 1.3	- 10.0	
Military facilities	2.7 7.5	2.6 7.2	2.8 7.0	2.4 6.7	2.2 7.2	2.5 6.7	2.3 6.5	2.1 7.7	2.7 3.4	28.0 - 2.5	
Sewer systems	7.7	8.0	7.8	7.9	7.8	7.9	8.3	8.8	- 3.8	- 12.1	
Water supply facilities Miscellaneous public	6.2 12.5	6.4 13.2	6.3 13.9	6.0 14.4	6.1 13.5	6.1 13.3	5.8 13.2	6.1 13.7	- 2.3 - 5.5	1.8 - 9.1	
wildoelianeous public	12.0	13.4	13.3	14.4	13.3	13.3	13.2	13.1	- 5.5	- 9.1	

NA Not available.

PPreliminary.

rRevised.

Z Less than 0.05 percent.

<sup>&</sup>lt;sup>1</sup>Includes the following categories of private construction not shown separately: residential improvements, railroads, electric light and power, gas, petroleum pipelines, and farm nonresidential. <sup>2</sup>Includes improvements.

Table 2. Value of Construction Put in Place in the United States, Not Seasonally Adjusted in Current Dollars

[Billions of dollars. Detail may not add to total due to rounding. Percent changes based on unrounded figures]

									Year to date		e
Type of construction	Feb <sup>p</sup> 2003	Jan <sup>r</sup> 2003	Dec <sup>r</sup> 2002	Nov 2002	Oct 2002	Sep 2002	Aug 2002	Feb 2002	Feb 2003	Feb 2002	Percent change
Total construction	57.0	59.8	63.5	72.7	77.2	78.2	79.4	57.1	116.8	115.8	0.9
Private construction <sup>1</sup>	44.2	46.1	48.6	55.6	58.2	57.4	58.5	43.6	90.3	88.9	1.5
Residential buildings <sup>2</sup> New housing units.  1 unit 2 units or more Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous buildings Telecommunications All other private	28.7 21.8 19.1 2.7 11.8 1.0 2.5 0.7 4.0 0.6 1.4 0.6 (NA)	30.8 22.7 20.0 2.7 11.7 1.1 2.5 0.7 3.9 0.6 1.0 1.4 0.5 1.0	31.5 23.3 20.8 2.6 12.5 1.2 2.8 0.7 4.0 0.6 1.5 0.6 1.5	37.0 26.4 23.8 2.6 13.8 1.2 3.0 0.7 4.7 0.7 1.1 1.6 0.7 1.4	38.6 27.1 24.3 2.8 14.2 1.3 3.0 0.8 5.0 0.7 1.2 1.6 0.7 1.5	38.6 27.3 24.5 2.8 13.8 1.2 3.0 0.8 4.9 0.7 1.1 1.5 0.7	38.8 27.5 24.5 2.9 14.2 0.8 4.9 0.7 1.5 0.7 1.5	25.7 19.3 16.8 2.5 13.6 1.4 3.2 1.0 4.4 0.6 1.3 0.7 1.2	59.4 44.5 39.1 5.4 23.5 5.0 1.4 7.9 1.2 2.0 2.8 1.1 (NA)	53.0 39.1 33.9 5.2 27.4 3.0 6.7 1.9 8.7 1.3 2.0 2.5 1.4 0.4	12.0 13.8 15.2 5.0 - 14.3 - 30.1 - 25.3 - 26.6 - 9.4 - 3.8 - 1.3 12.8 - 17.4 (NA)
Public construction	12.8	13.7	15.0	17.2	19.0	20.8	20.9	13.4	26.5	26.8	- 1.4
Housing and redevelopment Industrial Educational Hospital Other public buildings Highways and streets Military facilities Conservation and development Sewer systems Water supply facilities Miscellaneous public	0.5 0.1 4.2 0.4 2.1 2.5 0.2 0.6 0.6 0.5	0.5 0.2 4.5 0.4 2.2 2.8 0.2 0.6 0.6 0.5	0.5 0.2 4.6 0.4 2.4 3.5 0.3 0.6 0.7	0.5 0.2 5.1 0.4 2.7 4.5 0.3 0.6 0.8 0.6	0.5 0.1 5.7 0.4 2.8 5.7 0.2 0.6 0.8 0.7 1.5	0.5 0.2 6.2 0.5 2.7 6.3 0.3 0.9 0.9	0.5 0.2 6.6 0.4 2.7 6.4 0.2 0.7 0.9 0.7	0.4 0.2 4.3 0.4 2.4 2.8 0.2 0.6 0.7 0.5	0.9 0.3 8.8 0.8 4.3 5.3 0.5 1.3 1.0 2.1	0.8 0.3 8.5 0.8 4.8 5.7 0.4 1.2 1.3 1.0 2.1	25.0 7.7 2.7 - 3.5 - 9.6 - 8.1 30.3 5.4 - 5.0 4.5 - 0.5

NA Not available.

Table 3. U.S. Census Bureau Composite Fixed-Weighted (1996 Weights) Price Index and Implicit Price
Deflator

[1996 = 100]

Period	F	ixed-Weighted Inde	ex	Implicit Price Deflator			
	2001	2002	2003	2001	2002	2003	
January February March April May June July August September October November. December. Annual	118.3 118.7 118.8 119.2 119.7 119.6 119.9 120.2	121.5 121.5 121.3 121.2 121.6 122.2 121.9 122.2 122.6 123.1 123.3 '124.0	<sup>r</sup> 125.0 <sup>P</sup> 125.4	117.9 118.3 118.6 118.7 119.0 119.5 119.4 119.7 120.0 120.8 121.0 121.2	121.2 121.2 121.3 121.3 121.7 122.3 121.8 122.1 122.5 122.9 123.3 '123.8	<sup>(</sup> 125.1 P125.4	

PPreliminary. Revised.

Note: The fixed-weighted price index is a weighted average of the individual price index series used to deflate the Value of Construction Put in Place (VIP) series. In calculating the index, the weights (the composition of current dollar VIP in 1996 by category of construction) are held constant. Consequently, the index reflects only changes in prices. The implicit price deflator is a derived ratio of total current to constant dollar VIP (multiplied by 100). It is the average of the individual price indexes used in the deflation of VIP, but the prices are weighted by the composition of VIP each period. As a result, the implicit price deflator reflects not only changes in prices, but also changes in the composition of VIP, and its use as a measure of price change is discouraged.

PPreliminary.

rRevised.

<sup>&</sup>lt;sup>1</sup>Includes the following categories of private construction not shown separately: residential improvements, railroads, electric light and power, gas, petroleum pipelines, and farm nonresidential.

<sup>2</sup>Includes improvements.

Table 4. Relative Standard Errors and Coefficients for Standard Errors of Changes

	Relative	e standard error (p	Coefficient for changes		
Type of construction	Monthly estimate	Year-to-date estimate	Annual estimate	Month-to-month change (k1)	Year-to-date change (k2)
Total construction	2	2	1	.03	.03
Private construction	3	3	1	.04	.04
Residential buildings  New housing units  1 unit.  2 units or more	5 2 2 4	4 2 2 4	2 1 2 3	.06 .01 .01 .03	.06 .02 .02 .04
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous buildings	2 3 4 7 5 9 7 6 7	2 3 4 7 4 9 6 6 6	1 2 2 5 2 5 5 5 4	.02 .04 .05 .09 .06 .12 .10	.03 .04 .06 .10 .06 .13 .09 .08
Public construction	2	1	1	.03	.01
Housing and redevelopment Industrial Educational Hospital Other public buildings Highways and streets Military facilities Conservation and development. Sewer systems Water supply facilities Miscellaneous public	8 (NA) 3 6 3 4 (NA) 4 6 8	6 (NA) 3 6 3 (NA) 3 4 6 7	4 (NA) 2 4 2 2 (NA) 2 3 3 4	.11 (NA) .04 .08 .04 .05 (NA) .06 .08 .11	.09 (NA) .04 .09 .04 .04 (NA) .04 .06

NA Not available.

Note: All statistics are based upon 2002 data. The coefficient (k1) for the month-to-month change is applicable to change from the previous month and change from the same month a year ago.

The standard errors (SE) for month-to-month and year-to-date changes may be approximated by the following formula with the appropriate coefficient shown in Table 4:

SE(change) = (k1 or k2) (100 + % change shown in table).

For example, suppose Table 1 showed that private 'office' construction increased 9 percent from last month. The standard error of the 9 percent increase is about equal to 5 percentage points:

SE(9% increase) = (.05)(100+9) = (.05)(109) = 5%

Once the standard error is available, one can construct a 90 percent confidence interval of the change by multiplying the standard error by 1.6. In the above example, an approximate 90 percent confidence interval of the 9 percent increase for private 'office' construction would be between:

1 and 17 percent (9% plus or minus 8% (5% x 1.6)).

Table 5. Annual Value of Construction Put in Place in the United States in Current Dollars and 1996 Dollars

[Detail may not add to total due to rounding)

		Value (million	Percent change from 2001 to 2002			
Type of construction	Current	dollars	1996	dollars	0 1	4000
	2002 <sup>r</sup>	2001	2002 <sup>r</sup>	2001	Current dollars	1996 dollars
Total construction	846,057	842,539	692,672	704,747	0.4	- 1.7
Private construction <sup>1</sup>	642,189	650,030	524,776	542,782	-1.2	-3.3
Residential buildings <sup>2</sup> New housing units  1 unit  2 units or more	415,515 296,861 263,590 33,271	388,705 279,772 249,086 30,686	336,490 240,402 213,446 26,956	322,305 232,008 206,557 25,451	6.9 6.1 5.8 8.4	4.4 3.6 3.3 5.9
Nonresidential buildings Industrial Office Hotels, motels Other commercial Religious Educational Hospital and institutional Miscellaneous buildings	167,850 16,235 37,950 10,198 55,934 8,303 13,562 17,318 8,350	201,094 29,046 52,020 14,421 60,297 8,310 12,629 15,114 9,259	136,919 13,246 30,961 8,322 45,624 6,772 11,062 14,121 6,811	166,587 24,072 43,112 11,948 49,933 6,880 10,454 12,518 7,670	-16.5 -44.1 -27.0 -29.3 -7.2 -0.1 7.4 14.6 -9.8	-17.8 -45.0 -28.2 -30.3 -8.6 -1.6 5.8 12.8
Telecommunications	16,793	18,538	15,621	17,440	-9.4	-10.4
All other private	2,717	2,983	2,297	2,584	-8.9	-11.1
Public construction	203,868	192,509	167,895	161,965	5.9	3.7
Housing and redevelopment Industrial Educational Hospital Other public buildings Highways and streets Military facilities Conservation and development Sewer systems Water supply facilities	5,324 1,863 63,059 5,000 30,908 54,269 2,929 7,805 9,335 7,264	4,751 1,556 55,752 4,053 30,855 54,026 2,843 7,122 8,751 7,152	4,312 1,519 51,425 4,077 25,208 44,281 2,391 6,832 8,172 6,069	3,940 1,288 46,148 3,355 25,549 45,415 2,372 6,371 7,828 6,138	12.1 19.7 13.1 23.4 0.2 0.4 3.0 9.6 6.7 1.6	9.4 17.9 11.4 21.5 -1.3 -2.5 0.8 7.2 4.4
Miscellaneous public	16,112	15,648	13,610	13,561	3.0	0.4

NA Not available. PPreliminary. rRevised.

<sup>&</sup>lt;sup>1</sup>Includes the following categories of private construction not shown separately: residential improvements, railroads, electric light and power, gas, petroleum pipelines, and farm nonresidential.

<sup>2</sup>Includes improvements.